

REFERENCES

- Coquillett, D. W., 1900. Papers from the Harriman Alaska Expedition, IX. Entomological Results: Diptera. Proc. Wash. Acad. Sci. 2:389-464.
- Hendel, F., 1931. Entomologische Ergebnisse der schwedischen Kamtchatka-Expedition 1920-1922. 34. Diptera Brachycera. 3. Fam. Sciomyzidae, etc. Arkiv för Zool. 23A:1-12.
- Melander, A. L., 1920. Revision of the Nearctic Tetanoceridae. Ann. Ent. Soc. Amer., 13:305-333.
- Sack, P., 1930. Sciomyzidae, in E. Lindner, Die Fliegen der Palaearktischen Region 5 (Lfg. 125):1-48, pls. 1-4.
- Steyskal, G. C., 1950. The genus *Sepodon* Latreille in the Americas (Diptera: Sciomyzidae). Wasmann Jour. Biol. 8:271-297.

**ACTINOTHRIPS (HYBRIDOTHRIPS) ONEILLAE, NEW
SUBGENUS AND SPECIES**

(THYSANOPTERA, PHLAEOTHIRIPIDAE)

BY LEWIS J. STANNARD, JR., *Illinois Natural History Survey, Urbana*

When I visited the United States National Museum in December 1952, Miss Kellie O'Neill pointed out to me two unusual thrips specimens of the *Actinothrips* complex. Both specimens were from Central America; one was from Honduras and the other was from San Luis Potosi, Mexico. Apparently they represent a new species which Miss O'Neill has permitted me to describe herein. This species is named in her honor.

At least nine different types are now known in the *Actinothrips* complex. Except for the subgenus *Hybridothrips* described in this paper, each of these types was accorded full generic rank. They were distinguished chiefly by the size of certain setae, which are either enlarged or normal in thickness and length. When plotted such differences show no correlation, that is, if most of the cephalic setae are enlarged it does not necessarily follow that most of the prothoracic setae are enlarged, to cite one example. Most of the characteristics involved are repeated over again in the separate types or groups but in different combinations. Because of this independent scattering of like features between the groups it seems more feasible to me to consider the entities as subgenera and thereby emphatically point out their close relationship.

One of the entities of the *Actinothrips* complex, *Zactinothrips*, was regarded as peculiar because the third and fourth antennal segments bore a number of small sense cones around

the apices. It was of interest, then, to discover that the new Central American entity, *Hybridothrips*, also bears similar sense cones on these antennal segments. In the number of enlarged head setae, *Hybridothrips* is more nearly like *Zeuglothrips* but in the characteristic of the antennae and by the characteristic of the large fore tarsal tooth in the male sex, *Hybridothrips* is more like *Zactinothrips*. In these respects *Hybridothrips* is suggestive of the expected result that might be produced from an ancient cross between *Zactinothrips* and *Zeuglothrips*.

Actinothrips may be defined as a genus of the family Phlaeothripidae which has heavy maxillary stylets and which has the antero-lateral prothoracic setae placed near the mid lateral setae, back of the normal position. No species in this genus has prothoracic praepectal plates and many have a large pelta shaped much as in fig. 6. They vary greatly in size from medium, 2 mm., to large, over 7 mm. It is their tendency to bear enlarged setae on the body including certain segments of the antennae and legs, and to have long hairy tubes.

As mentioned before the various species have been grouped into several genera. These groupings may be continued in use but I prefer to consider them as subgenera. Included as subgenera could be: *Actinothrips* s. str. Bagnall, 1909; *Hystriothrips* Karny, 1912; *Zeugmatothrips* Priesner, 1925; *Zeugmatothripoides* Bagnall, 1929; *Zactinothrips* Hood, 1936; *Zeuglothrips* Hood, 1936; *Cyphothrips* Hood, 1952; and *Saurothrips* Hood, 1952. *Hystriothrips* is not known to me but as nearly as I can tell from its description and illustrations it seems likely that this genus rightfully belongs with *Actinothrips*. Karny's figure of *Hystriothrips phasgonura* shows that the antero-lateral prothoracic setae are displaced posteriorly and arise near the mid lateral pair just as in typical species of *Actinothrips*. By this characteristic as well as by the characteristic of the long, hairy tube and the presence of many enlarged setae on the body and antennae, it is most reasonable to suppose that the two entities are relatives if not congeneric. However, my opinion is not shared by some other thysanopterists; Hood in 1925, for reasons not stated, placed *Hystriothrips* in another tribe apart from the rest of the *Actinothrips* complex.

Despite the similarity of the names, *Actinothrips* is very distinct from *Anactinothrips*. Unlike *Actinothrips*, *Anactinothrips* has praepectal plates and its mesopraesternum is well developed. *Anactinothrips* is more closely related to such genera as *Elaphrothrips* and *Idolothrips*. *Actinothrips* which lacks praepectal plates and has a degenerate type of mesopraesternum is more closely related to such genera as *Atractothrips*.

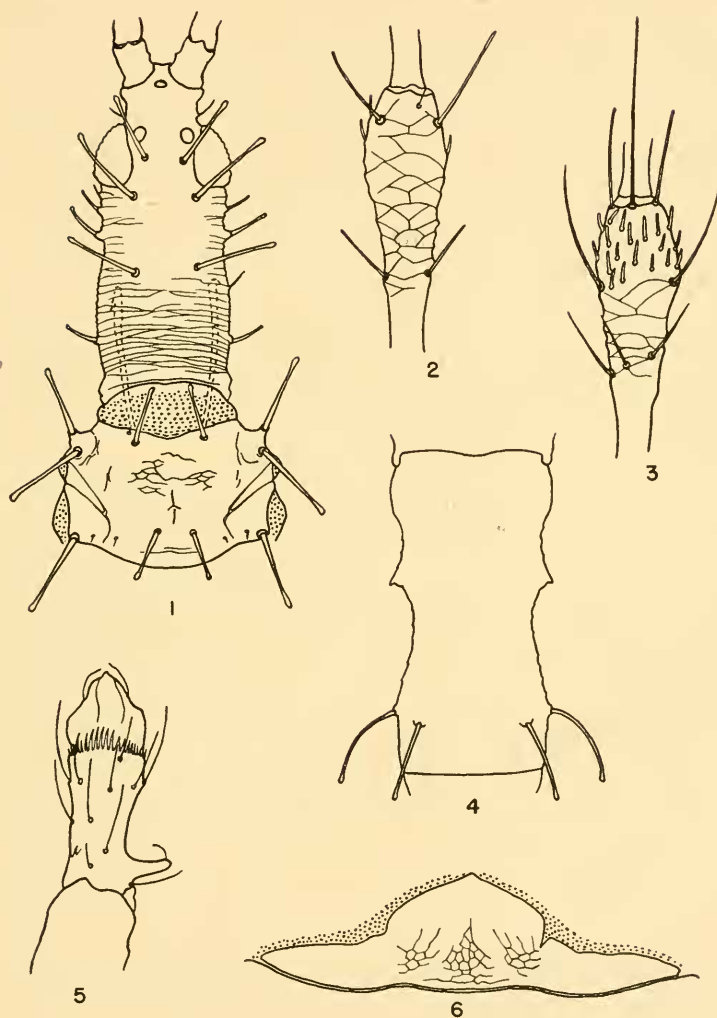


Fig. 1, head and prothorax, dorsal aspect; fig. 2, apex of left antennal segment III, dorsal aspect; fig. 3, apex of left antennal segment III, ventral aspect; fig. 4, outline of abdominal segment VIII, dorsal aspect; fig. 5, left fore tarsus; fig. 6, pelta (differentiated shield on dorsum of abdominal segment 1).

Genus **Actinothrips** subgenus **Hybridothrips**, new subgenus

Head transversely striate, strongly elongated beyond eyes; with three pairs of enlarged cephalic setae; with two pairs of prominent enlarged cheek setae and one pair of slightly enlarged cheek setae near the region of the eyes; antennal segments III and IV each with numerous small sense cones on the ventral surface near the apex. Prothorax with all major setae enlarged, fig. 1; fore tarsus of male, at least, with a large inner tooth. Abdominal segment VIII of male, at least, with a pair of lateral tooth-like projections, fig. 4; tube elongate, moderately hairy.

Type of subgenus.—*Actinothrips (Hybridothrips) oneillae*, new species.

Actinothrips (Hybridothrips) oneillae, new species

Male (macropterous).—Length distended, exclusive of the antennae, about 5.5 mm. Color of body black; legs beyond the base of the femora yellow; antennal segments I and II black, segments III to VI yellow except apex of V and VI which are blackish brown, segments VII and VIII blackish brown. Wings, each with a dark median streak.

Head as in fig. 1; antennal segments I and II with several stout setae which are dilated at the tips, antennal segments III and IV greatly elongate, each with about 15 small ventral sense cones at the apex in addition to the normal longer sense cones, figs. 2 and 3. Fore tarsus with a strong prominent tooth, fig. 5; fore wings with about 20 accessory subapical fringe setae. Body and legs with many enlarged setae which are dilated at the apices.

Types.—Holotype ♂; San Luis Potosi, Mexico (intercepted at Laredo, Texas, on orchid); October 7, 1946; (Cary); lot no. 46-17211. 1♂ paratype; Honduras (intercepted at Brownsville, Texas, on orchid); November 25, 1947; (R. A. Alexander); lot no. 47-16710. These types, cat. no. 61856, are deposited in the collections of the U. S. National Museum.

BOOK NOTICE

A REVISIONAL STUDY OF THE BEES OF THE GENUS PERDITA
P. SMITH, WITH SPECIAL REFERENCE TO THE FAUNA OF
THE PACIFIC COAST. Part I. By P. H. Timberlake. Univ. Calif.
Publ. Ent. 9: 345-432, pls. 13-26, 1954.

Part I of this long awaited revision includes a key to the 19 subgenera recognized by the author, nine of which are new, and detailed revisionary treatment of the first 15 subgenera. Keys to the component forms are included for all but monotypic subgenera. More than 40 new species and subspecies are described. The illustrations are of the male genitalia and subgenital plates of the forms treated in this part.—KARL V. KROMBEIN, *Agricultural Research Service, Washington, D. C.*